

6. Kali Era as Gleaned from the Literary and Epigraphical Evidences

K.V. Ramakrishna Rao

Introduction : Literary evidences dated back to Vedic period (c.3500 BCE) and epigraphical evidences dated back to Mauryan period (c.300.BCE) are available specifically dealing with the concepts and principles of Kalpa, Yuga, cycles of Yuga, time reckoning, lunar and solar eclipses, conjunction of planets, asterism etc. The references about Kali era/yuga are thus particularly dealt with in this paper. The distinct connotation of the words and expressions are taken up from the literary evidences, mainly the Vedic. Instead of plain, literary and ritualistic meaning, the astronomical connotation is given in the context and interpreted.

The Meaning of the word Kali: First the meaning of the word Kali is taken up. According to dictionaries, the meaning of Kali is manifold¹:

1. Strife, quarrel, dissension, contention (Sisupalavadha. 7.55); Raghuvamsa.9.33; Amarusataka. 19.2.
2. War, battle.
3. The fourth age of the world, the Iron Age.
4. Kali personified (the Kali which afflicted Nala).

5. The worst of any class.
6. The Bibbitaka tree.
7. The side of a dice which is marked with one point.
8. A hero.
9. Sorrow.

Such different shades of meaning could have been attributed to one and the same word only during a long period of time. Moreover, in Sanskrit, it is natural that each word has different connotations to be used in various contexts.

Kali, according to the Vedic Literature: The word Kali occurs in the Vedic literature connoting the following meanings:

1. The word Kali occurs in Satapatha Brahmana denoting the dice but implying different meaning. Julius Eggeling's translation of the relevant verse is as follows: one the Kali, is indeed dominant over the (other) dice, for that one dominates over all dice: therefore, he says, 'Dominant thou art: may these five regions of thine prosper!', for there are indeed five regions, and all the regions he thereby causes to prosper for him" (V :4 : 4 :6.) Here, the playing of dice is compared with the winning of kingdom.

2. In Taittiriya Brahamana.(1,7,10) while describing the game of dice, it is mentioned: "This king has overcome the regions, he hands over (to

the king) five dice; for these are all dice: he thereby renders him invincible". Here also, the playing of dice is compared with the winning of kingdom.

3. According to Katya.Sr.(XV.7, 18-19): in explaining a mode of playing dice, it says that the Kali represents the Sagata (tribesman) and the king and that those come after him play the krita. The winning of the king is implied.

4. Chandog. Up.IV.1,4 says that Saint Raikva got good from everything, as the krita of the dice fell down. The victory is implied, as krita falls down. Kali must have been on the top, thus Kali conquering others.

5. According to Shadvimsa Brahmana V.6, the terms Pushya, Dvapara, Kharva, and Krta signify the four ages.

6. Aitareya Brahmana VII. 15.4 connotes the terms to four attitudes of man - lying low, he is Kali; rousing himself, he is Dvapara; getting up, he is Treta and moving, Kruta.

7. Manus attributes them to four different moods of king towards his subjects (Mahabharata-Udyogaparva, Ch.132, sl.17; Santi-parva. Ch.21, sl.29)

8. Later, Manus attributes the four words to four aeons (Chap.1, 70-71) and specifically mentions that Kaliyuga contains 1200 celestial years equivalent to 4,32,000 terrestrial years.

Based on other Vedic literature, modern scholars try to interpret that the name Kali was used in association with the dice and thus, chess. As the Western scholars, at that time evidently engrossed in the origin of the game, their discussion delved more on the game than the other possible interpretations.

However, Goldstucker gives the chronological interpretation to this word. According to him this game of dice is intended to symbolize the victory of the present age or kali-yuga, over the former ages; but the commentator rather takes it symbolizing the king's dig-vijaya, or victorious sway in every quarter.

Some scholars argue that the division of time into the declining cycle of Kruta, Treta, Dvarapa and Kali is not a concept clearly met in the early Vedic literature, as such concept of Kali as a definite epoch of calculated duration in the cosmic cycle is met with in Manu Smriti (Chap.1, 70-71). Thus, Kali becomes a period of 1200 celestial years i.e., $1200 \times 360 = 4,32,000$ terrestrial years (Mahabharata. Vanaparva.Ch.174, Sloka.25; Vishnupurana.xx.6) But, it is evident that experts of different fields have dealt with the subject matter exclusively instead of an inclusive and interdisciplinary approach. The Sanskrit Scholars have not brought out the astronomical significance of the words used and the astronomical and mathematical scholars have not

interpreted the Sanskrit verses properly. Therefore, some specific verses are taken up to bring out the fact.

1. *One Yajur Veda verse goes likes this: Krutayadhinavadarsha tretayai kalpinam dvarapaya adhikalpinam aaskandhaya sabhastanum (Yajurveda-Vajasaneyi Samhita.30.18)*

For this, K.V. Sarma has given the following translation:

“To Kruta the offering of Adinavadarsa is to be offered, to Treta the offering of Kalpin, to Dvapara the offering of Adhikalpin and to Askanda the offering of Sabhasthanu”.

Then, he writes in the footnote, without explaining the meaning of the crucial words-Adinavadarsa, Kalpin, Adhikalpin and Sabhasthanu - that,

“The terms Kruta etc., of the Veda, are not used in the definitive sense of time measures, but have during later ages, been used to connote large units of time called yugas (ages, aeons)”.

But, the key words are to be understood and interpreted in the astronomical context and not in the ordinary literary context or to get any ritualistic interpretation. The verse is interpreted as follows:

Sanskrit terms

Kruta
Ya
Adhina
Vadarsha
Treta
Yai
Kalpinam
Dvapara
Ya
Adhikalpinam
Aaskanda
Ya
Sabhasthanum

**Translation/
Interpretation**

Kruta
Becomes
The first days (and)
Year
Treta
Becomes
Kalpa
Dvapara
Becomes
more kalpa
battle/war
becomes
a place of
Assembly /
a conjunction

Here, the meanings of ya and askanda are given:

Ya = 1. To go, move, walk, proceed
2. to march against, invade
3. to go to, march towards
4. to pass away, elapse (as time)
5. to vanish,
6. to submit,
7. to become, happen, occur
8. to have intercourse, to be born,
to appear

askanda =

1. Attack, assault, outrage
2. Ascending, mounting, stepping over
3. Reproach, abuse,
4. The walk of a horse, state of galloping at full speed
5. Battle, war

Therefore, the meaning can be - "Kruta becomes the days and years (of reckoning). Treta becomes kalpa (with enumeration), Dvapara becomes (with) more kalpas and (the last one) becomes a place of assembly / a conjunction or (coinciding with) a war / battle".

2. Another verse from Aitareya Brahmana is translated and interpreted by scholars like this:

Kali: sayaano bhavati samjihanastu dvaparah:

*Uttishtatastrata bhavati krutam sampadyate
caraishcaraiveti caraiveti*

(Aitareya Brahmana. 7.15.4)

K.V. Sarma gives the translation: "One who sleeps becomes Kali; one who sits becomes Dvapara; one who gets up becomes Treta; and one who moves ahead becomes Kruta. Therefore keep on moving, keep on moving". According to Batukanath Bhattacharya, the translation is : The four attitudes of man - lying low, he is Kali; rousing himself, he is Dvapara; getting up, he is Treta; and moving, Kruta". Here, it is evident that the crucial words have been personified in the first phase and they are qualified as attributes or attitudes in the second phase. But, in the astronomical interpretation, only the planets, eclipses, time reckoning and such related subjects are dealt with and therefore, the verse is interpreted as follows:

Sanskrit terms	Translation/Interpretation
----------------	----------------------------

	Kali: Kali
Sayaano	Sleeps (like a snake)
Bhavati	Your honour / you
Samjihanastu	forming a group of four
Dvapara:	in dvapara
Uttishthastreta	rise higher in Treta
Bhavati	you are
Krutam	in kruta
Sampadhyate	get perfected / fulfilled
Caraishcaraiveti	go ahead
Caraiveti	go ahead

Thus, the time is perfected in Kali, still increased in Dvapara, still increased in Treta and attained lengthier in Kruta like a snake.

Therefore, it is interpreted that though the words, Kruta, Treta, Dvapara and Kali have been mentioned in generic sense as appearing, they denote the four yugas only taking the other possible meanings of the words in the astronomical context. Moreover, the period is reduced in each yuga just like the four sides of a dice (excluding the top and bottom faces), thus implying the numbers of the sides with 4,3,2 and 1. The ratio tallies with the respective years of the four yugas 4800; 3600; 2400 and 1200 and they are named after the same words Kruta, Treta, Dvapara and Kali. Next, the concept of yuga is taken up.

The Concept of Kalpa/Samvat/Yuga: First, the concepts of the terms are explained.

Kalpa: *Kalpa* = practical, feasible, possible; to order or arrange well; a cycle of time; usually a day or day and night of Brahma.

Samvat/ Samvarta; Sam-varta=turning towards, crumping up. One of seven clouds particularly the one abounding in water, found at the periodical destruction or dissolution of the universe.

Pralaya = to dissolve, vanish, be absorbed. A period of rest as opposed to Manvantra.

Yuga: An age. While the exoteric classification gives only four yugas - Kruta or Satya, Treta, Dvapara, and Kali, the esoteric or cycles regard Kali as the turning or balancing point of greatest materiality in series of seven cycles, retracting the Yugas until the age of Satya is realized. Technically a Yuga is a very small part of a Kalpa.

The Cosmical / Cyclical / Yuga periods: The cyclical nature of yugas/kalpas was also known in ancient India.

The Junagadh inscription of Rudravarman dated 150CE -

"...the dam of the great lake Sudarsana was burst by the effects of a great fall of rain, which swelled to excess the rivers that filled the lake and was accompanied by "a wind of a most tremendous fury befitting the end of the Yugas".

The Gangdhar inscription of 423 CE describes, the king Visvavarman as "surpassing in brilliance the most unendurable samvartaka-fire".

The mention of Kalpa, Yuga, Cycles mentioned in the Ancient Inscriptions: The mention of Kalpa, Yuga, Cycles mentioned in the inscriptions dated from approximately 3rd century BCE prove that such concepts and related calculations have been in existence before that period.

The inscriptional evidences conclusively prove that concept of yuga was widely used more in South India than in North India. Moreover, the ingenious method of mentioning the elapsed days since the beginning of Kali era surprises as to how they could have calculated and recorded. Therefore, what is mentioned in the Aryabhatiyam is not invented or introduced by the author, but simply recorded by him for authority. As it was not used as per the direction or compulsion of any King or Ruler, its wide popularity and acceptance by common people is established.

Conclusion: From the above discussion, the following inferences are derived:

1. The astronomic interpretation of the literary evidences point to the prevalence of the concept of four yuga cycles during the Vedic period.

2. The concept of association of a war and conjunction with the yuga has been there in the

Inscriptions	Related words recorded	Remarks
Asokan Rock Edict No. 1 (Minor)	Jambudvīpa	Asokan inscriptions have been dated to 3rd century BCE. Kalsi text, line. 12
Rock Edict No. 4	Dva kapam = yavat = Kalpam	
No. 5	Dva kapam = kalpam	
Kalsi text	Kapam = kalpam	Line. 14
The Shabazgarhi text	Kapam = kalpam	
The Maneshehra text	Kapam = kalpam	
The Girnar text	Dva kapam = kalpam	Line. 2
The Girnar text	Ava samvata kapa = yavat Samvarta kalpa = until the aeon of destruction	
The Junagadh inscription of Rudravarman dated Approximately to 150 CE.	Yuga = the end of the world kalpa	A storm of a most tremendous fury as at the time of the end of the world.

<p>Kalachuri - Chedi Inscriptions</p>	<p>A Yugadi is an anniversary of the commencement of a Yuga and falls on Kattika su.si.9, Vaishaka su.di., Magha amavasya and Bhadrapada va.di.13 for Kruta, Treta, Dvapara and Kaliyugas respectively.</p>	<p>Corp.Insc.Ind., Inscriptions of Kalachuri-Chedi Era.</p>
<p>Kumbhi plates of Vijayasimha</p>	<p>A Yuga in the year 933</p>	<p>Ibid</p>

Brahmana literature (c.2500-1800 BCE). Thus, the Mahabharata war and planetary conjunction are implied.

3. The four yuga cycles have been specifically named after Kruta, Treta, Dvapara and Kali during the Brahamana period and it has been associated with the decreasing ratio of years.

4. Comparison of such periods with the dice proves the usage of the ratio 4:3:2:1, which is equal to the number of years in the respective periods/yugas.

5. The epigraphical evidences prove the well-established and already prevalent usage of such notation before c.300 BCE.

6. The undecipherment of Indus Valley seals could not be a lacuna in interpreting the epigraphical evidences to conclude that before 300 BCE, such concepts were not there, since Vedanga Jyotisha (c.1400 BCE) also deals with Yuga.